

**"METHOD AND APPARATUS FOR ANALYZING BIOLOGICAL
TISSUE IMAGES"**

ABSTRACT

The present invention relates to a method and an
5 apparatus for processing images of biological tissues,
in particular of human or animal origin. The metric
quantification of a biological body part or tissue or of
an abnormal material spot or aggregate contained therein
is also performed by means of the invention method. The
10 method according to the invention is applied in
particular to the Computed Axial Tomography technique.

In particular, the present invention relates to a
method for processing images acquired by a CAT scan
technique, comprising a stage of homogeneity map
15 generation (HOMO-GEN) which comprises the following
steps:

- 1a) dividing the image into boxes of different size
iteratively, firstly in four quadrants, then proceeding
by linear or exponential steps till a predefined size;
- 20 2a) calculating for each quadrant at each division
scale the relative dispersion (RD) obtained as the
Standard Deviation divided by the mean value of the
pixels, in order to associate to each quadrant a set of
values of RD;
- 25 3a) generating a homogeneity map as a grey scale

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image, each point's brightness being given by the mean of the set of values of RD for each quadrant, wherein the image's regions having higher brightness correspond to homogeneous regions.

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(FIGURE 2)